1. Name of the Planned Program.

Farm and Business Management

2. Program knowledge areas.

- KA 601 Economics of Agricultural Production and Farm Management-60%
- KA 602 Business Management, Finance, and Taxation-10%
- KA 603 Market Economics-20%
- KA 605 Natural Resource and Environmental Economics-10%

3. Program existence

- Long Term (more than five years)

4. Program duration

- Long Term (more than five years)

5. Brief summary about Planned Program

The Farm and Business Management team proposes to extend information and build skills of farm operators, farm families, related agribusiness managers and agricultural educators. Four areas of knowledge will be emphasized: farm profitability and financial management; legal and business planning; economics of environmental management; new business development.

6. Situation and priorities

Agricultural technologies are appearing today that just a few years ago weren’t even considered. Farmers are no longer buying just seed, but bundles of traits. Specialty traits, pesticide resistance, etc. are all a part of the package being offered. Machinery options have increased substantially over the past few years, as well. Global positioning, automatic guidance and other technologies all offer improved efficiencies, but all come with a cost.

Changes in farmland ownership and farmland use have been equally dramatic. The percent of farmland owned by people over 75 years old has doubled since 1982. Today almost one-half of the land is owned by people over the age of 65. The percent of land owned by people who do not live in Iowa has more than tripled in the past few decades. Almost one in every five acres is owned by a non-Iowa resident.

The average age of Iowa farmers is increasing. There are more farmers over the age of 65 (25 percent) than there are under the age of 35 (7 percent). Young people who aspire to a career in farming, but do not have a family operation to fit into, find it very hard to acquire the necessary resources.

Another change that has significant implications for younger farmers is the shift from crop share to cash rent. In 1982, the amount of leased land was about equally divided between crop
share and cash rent. By 2002, 72 percent of the leased land was cash rented. This hampers the ability of the beginning farmer to share risk, and it requires more capital for them to gain access to the land.

Land values and cash rents have steadily increased in the last decade. Commodity payments from the USDA and record crop yields have been the primary drivers. Benefits have accrued mostly to land owners (including owner-operators). If USDA program benefits are reduced, land values and rents may fall and relatively more income will come from operating the land rather than owning it, a trend that should favor beginning farmers and tenants.

Agricultural practices utilize a considerable amount of fossil fuel. The price of energy has become higher and more volatile over the past few years. Nitrogen fertilizer has risen by over 15 percent the past year. In addition, the refining capacity of this country is becoming more concentrated in geographic areas. This concentration increases the likelihood for supply disruptions and more price volatility.

Another trend that has turned attention towards alternative production has been the concern over food safety and bio-security. Threats of livestock diseases, soybean rust, and other events have led people to question the vulnerability of our food system, and have created increased interest in traceability and producer identification.

Rapid expansion in ethanol production is making agriculture a major producer of energy as well as food. This trend sets the stage for significant future changes in crop rotations, fertilizer demand, infrastructure needs for fertilizer, grain drying, storage, and handling, as well as changes in livestock rations and exposure to risk of major changes in feed costs with adverse weather and relatively inelastic corn processing demand.

7. Assumptions made for the Program

- Beliefs we have about the program and people involved
  - Most farm families have among their goals a desire to operate a profitable business.
  - Resources from federal, state and county government will decrease in real terms, staff numbers will continue to decline.
  - The knowledge base relating to farm and business management is extensive and will continue to expand.
  - Institutional priorities will be to carry out programs that can generate user fees or can be funded externally. Extension clientele will increasingly depend on electronic communication to receive information.
  - Numbers of farm families will decrease, but they will still constitute a large clientele group.

8. Ultimate goal(s) of this Program

Goal: Farm Profitability and Financial Management: Crop and livestock producers will increase the profitability of their operations while controlling risks consistent with their financial resources and personal preferences.

Goal: Legal and Business Planning: Farmers, landowners and agribusiness managers will use contracts, leases and business organization plans to increase their control of key resources, control financial and legal risks, and conserve assets and efficiencies for the next generation.
Goal: Environmental Management: Farmers will implement practices that conserve the productivity of agricultural resources as well as enhance the quality of environment for the non-farm population.

Goal: New Business Development: Producers and other entrepreneurs will increase the number of alternative or value retained businesses in Iowa. The number of Iowa communities looking at agriculture as an important component of community economic development will increase.

9. Scope of Program

In-State Extension
In-State Research
Multi-state Integrated Research and Extension

Inputs for the Program

10. Expending formula funds or state-matching funds

- Yes

11. Expending funds other than formula funds or state-matching funds

- Yes

12. Estimated amount of professional FTEs/SYs to be budgeted for this Program

<table>
<thead>
<tr>
<th>Year</th>
<th>Extension 1862</th>
<th>Extension 1890</th>
<th>Research 1862</th>
<th>Research 1890</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>20</td>
<td></td>
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<tr>
<td>2008</td>
<td>20</td>
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<tr>
<td>2011</td>
<td>20</td>
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</table>

Outputs for the Program

13. Activity (What will be done?)

Goal: Farm Profitability and Financial Management:

- Increase the knowledge of grain, livestock and dairy producers, as well as agribusiness persons, of up-to-date short-term market outlook information.
- Improve crop and livestock producers’ ability to choose among alternative marketing strategies and develop marketing plans for their commodities.
- Improve crop and livestock producers’ ability to control price and production risks by choosing combinations of insurance programs, USDA commodity programs, and marketing tools.
- Improve crop producers’ understanding of the economic and risk implications of new technology choices.
- Increase farmers’ ability to assess their own financial risk bearing ability and how it will be impacted by higher interest rates and other production costs.
- Improve agricultural lenders’ ability to manage and evaluate farm loan portfolios and control risk within their own credit institutions.
- Increase farm employers’ knowledge about current wages and benefits for farm employees, and improve their labor management skills.
- Increase the knowledge of farmers and agribusiness persons about how agricultural policies and production around the world impact their businesses locally.
- Increase the access for female farmers and farm partners to a broad array of risk and financial management topics, in learning communities composed of their peers.

**Goal: Legal and Business Planning:**
- Increase the recognition of the importance of an estate plan for stability and continuity of farm businesses.
- Increase the knowledge of on-farm and off-farm heirs of strategies for transferring income, ownership and management of farm businesses.
- Build skills necessary for success through programs targeted to beginning farmers.
- Increase farmers’ and landowners’ skills in comparing alternatives for acquiring the use of major farm assets, including ownership, leasing and contracting.
- Train tax practitioners to help Iowa farmers manage taxes efficiently.
- Build skills to help farm families strategically evaluate business opportunities involving new enterprises, new resources (including new operators) and changes in legal/organization structures.

**Goal: Environmental Management:**
- Provide crop and livestock producers and landowners current information and analytical tools for evaluating their participation in conservation programs that are available.
- Develop educational materials for consultants and others who advise farmers and landowners on conservation program issues and regulations, and train them on their use.
- Assist producers in assessing the environmental and economic impacts of alternative farming methods and enterprises.

**Goal: New Business Development:**
- Increase producer and other entrepreneur awareness related to creating or enhancing alternative or value retained businesses.
- Increase business and marketing skills related to new food and farming ventures for ISUE staff and other agricultural service providers.
- Enhance skills necessary for development of alternative or value retained enterprises per year geared toward women, who make up a majority of food production enterprises in Iowa.
14. Type(s) of methods will be used to reach direct and indirect contacts.

<table>
<thead>
<tr>
<th>Extension</th>
<th>Indirect Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Methods</td>
<td></td>
</tr>
<tr>
<td>• Conferences</td>
<td>• Publications</td>
</tr>
<tr>
<td>• Workshops</td>
<td>• Fact sheets</td>
</tr>
<tr>
<td>• In-service training</td>
<td>• Mass media</td>
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<td></td>
<td>• Internet based study courses</td>
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<td></td>
<td>• Newsletters</td>
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<td>• Decision aids</td>
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<td>• Internet web sites</td>
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15. Description of targeted audience.
Grain, livestock and dairy producers
Agribusiness professionals
Agricultural lenders
Farm employees
Female farmers and farm partners
On-farm and off-farm heirs
Beginning farmers
Landowners
Tax practitioners
Entrepreneurs
Farm families
State agencies and NGOs

Target for the number of persons (contacts) to be reached through direct and indirect contact methods.

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contact Youth</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>2011</td>
<td>15,000</td>
<td>3,350,000</td>
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17. (Standard Research Target) Number of patents.

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
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<tbody>
<tr>
<td>2007</td>
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<tr>
<td>2008</td>
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<td>2009</td>
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<td>2010</td>
<td>0</td>
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<tr>
<td>2010</td>
<td>0</td>
</tr>
</tbody>
</table>

18. Output measures
Output Text: Number of Research Projects completed (Exp. Station)
2007 Target: 0
Outcomes for the Program

19. Outcome measures

**Outcome Text:** Number of crop and livestock producers who choose marketing, insurance and USDA program alternatives that are consistent with the risk bearing ability of their businesses and their personal preferences for managing risk.

2007 Target: 500  
2008 Target: 500  
2009 Target: 500  
2010 Target: 500  
2011 Target: 500

**Outcome Text:** Number of female farmers and farm partners who take a more active role in decision making for their businesses.

2007 Target: 10  
2008 Target: 100  
2009 Target: 100  
2010 Target: 100  
2011 Target: 100

**Outcome Text:** Number of agricultural lenders who finance the acquisition of new resources or implementation of new technology for their borrowers while maintaining liquidity and controlling financial risks.

2007 Target: 100  
2008 Target: 100  
2009 Target: 100  
2010 Target: 100  
2011 Target: 100

**Outcome Text:** Number of beginning farmers who objectively measure the likelihood of meeting their individual and family goals through entering a farm business.

2007 Target: 25  
2008 Target: 25  
2009 Target: 25  
2010 Target: 25  
2011 Target: 25

**Outcome Text:** Number of Iowa businesses providing inputs and/or services to farmers that will offer informed marketing and financial advice.

2007 Target: 150  
2008 Target: 150  
2009 Target: 150  
2010 Target: 150  
2011 Target: 150

**Outcome Text:** Number of income tax practitioners that increase the accuracy and efficiency of the farm returns that they prepare.

2007 Target: 1000  
2008 Target: 1000  
2009 Target: 1000  
2010 Target: 1000  
2011 Target: 1000

**Outcome Text:** Number of producers and landowners who make choices among CRP, CSP and commodity payment programs consistent with their goals of increasing profits and protecting agricultural resources.

2007 Target: 100  
2008 Target: 100
2009 Target: 100
2010 Target: 100
2011 Target: 100

**Outcome Text:** Number of producers and other entrepreneurs who increase their awareness of alternative enterprises or value retained opportunities by either attending an educational program or downloading educational materials from a website.

2007 Target: 300
2008 Target: 300
2009 Target: 300
2010 Target: 300
2011 Target: 300

20. **External factors which may affect outcomes.**

- Passage of a new farm bill.
- Implementation of current and future decisions by the World Trade Organization and expansion of regional and bilateral trade agreements.
- Changes in environmental and biosecurity regulations affecting agriculture.
- Extension staffing patterns and retirements, especially in the Department of Economics at ISU.
- The advancing age profile of farm operators and owners
- Changing learning styles of farmers and agribusiness persons
- Continual evolution of communications technology
- Increased global demand for energy and improved technology for extracting it from agricultural products.
- Development of more specialized traits in crops and livestock.
- Changes in livestock numbers and opening or closing of international borders to livestock trade, resulting in volatile price movements.

21. **Evaluation studies planned.**

Compare benchmark data from the following sources before and after implementation of the plan:

- Census of Agriculture (2007 and 2012)
- ISU survey of land tenure and leasing practices (every 5 years)
- Annual ISU surveys of cash rental rates, land values, and farm custom rates
- Special surveys of farm employee compensation, farm succession plans and other topics
- Farm record data from the Iowa Farm Business Association
- ISU Farm and Rural Life Poll results

Note: specific programs will be evaluated by comparing characteristics of target audiences before and after participation, and documenting changes in management practices.

22. **Data Collection Methods.**

- X Sampling
- Whole Population
- X Survey
- X Mail (surface, electronic)
- Telephone
- On-site
- Interview
Structured/unstructured
Case study
X Observation
Portfolio reviews
Tests
Journals
Other